



OWNERS MANUAL



THE BEST PIT BIKES IN
THE UK AND ACROSS EUROPE

OWNERS MANUAL

introduction

Look at you all chuffed to bits... and so you should be! You have chosen wisely my young Jedi, the Pit Bike you have bought is a Welsh Pitbike !! In our opinion, the best Pit Bikes available in the world. Did you know that we put every conceivable effort into design, sourcing and specification in order that you will enjoy your pit bike for many 'races with your mates' to come? Well we do and now you are the lucky owner of one. Before you chuck on your lid and go razzing off somewhere you shouldn't, please take a little time to read through your manual and get to grips with your new bike. There are plenty of tips in this manual to help you get the best out of your bike. For example, do you know how to tension your chain? Because after about an hour riding, it's going to stretch as it beds in and you will need to adjust it. What about tyre pressures, do you know what they should be? The wrong tyre pressure, and before you know it, you have a puncture... I bet you didn't know that did you? and you were about to go off out somewhere and learn the hard way? time to start reading...

Pit Bike Definition

An open cradle frame, a horizontal engine, wheel size no greater than 14/12 inches

Pit Bike Origin

Compact transport for getting around at race meetings and impressing girls

Your new Bike

Needs a thorough checking over (should have been done by your dealer, but it's your responsibility to make sure it was done and that you maintain it to the standard outlined in this manual). Your bike also needs to be run in for 2 hours and then serviced (see the service schedule in the back).

What is my bike capable of?

Unless stated otherwise on the Pitbike Direct website in writing, your bike is designed for field or trail use (it's a fun bike, not a competition machine). Your bike is not sold for use on motocross mini bike or bmx tracks or for racing. Your bike has not been designed for jumping. Failure to adhere to these guidelines may result in component failure and possible injury. If you want to use your bike at a track or for jumping, please speak to your Welsh Pitbikes dealer who will recommend the appropriate upgrades (usually simply handlebars & shock upgrades). **If you choose to ignore the guidelines, you do so at your own risk.**

Where can I ride it?

Unless you have modified your bike for use on the road, you have the appropriate documentation to support the conversion, tax & insurance you must NOT take your bike anywhere near a public highway (road), this includes the pavement or the grass verges by the road. You cannot even push your bike along a public highway or pavement, this is illegal & you may be subject to points on your licence, a fine and/or your bike being confiscated (UK - for other countries please consult your local law).

The only place you can legally ride your pit bike is where the land is privately owned and the owner has given you permission to ride there.

Notes on Safety

Clothing

Pit biking carries risk of injury by its very nature as with any extreme sport. Please ensure you are adequately protected when riding:

- Always wear a Gold ACU approved helmet (UK) or other officially recognised motor sport approved helmet
- Always wear suitable motocross or minibike protective gloves & boots & goggles (where applicable)
- Always wear body armour e.g. chest/back/shoulders/elbows/knees/thighs
- Do not ride beyond your limits

All media recorded by Welsh Pitbikes and used for marketing purposes has been carried out under controlled conditions by professional riders with the appropriate level of support and back-up. Do not attempt to copy any of Welsh Pitbikes media unless you are qualified and capable to do so.

Risk of FIRE

When refuelling, always switch off your engine, do not smoke and keep petrol away from other sources of ignition. Be aware that fuel could potentially be ignited by a red hot exhaust system. If you drop, crash or lay your bike on its side, **ALWAYS** check your air filter is not soaked in petrol before you re-start your engine.

Poorly adjusted float height or being laid on its side can cause fuel to leak from the carb & there is the potential that a spark from your engine or other source could start a fire.

Your Bike

How do I make it work?

In this section we outline the important features of your bike to help you get your head around it. Please make sure you read it thoroughly in order to get the most out of your bike. You can use section appendix A, to reference the key features of your bike via photo, to help with this section.

Fuel Tap

Located to the left hand side of your tank, the majority of Welsh Pitbikes fuel taps are 3 position. The middle setting in 'off' i.e. no fuel, turn the tap down for 'main tank' when this runs out, turn the tap all the way up for 'reserve tank'. Once you have switched to reserve tank, It is advisable you get back to your fuel source and re-fill your fuel tank. Note, some taps only have on and off settings.

Kill Switch - enables or kills the ignition (like the key in a car but without the whirring noise)

Located on the handle bars by you left hand. Switch to run before you try & start the engine. Switch again to kill when you want to stop the engine.

Kick Start - starts the engine

Foot operated lever by you right leg/foot. Kick down on this to spin the engine over & start it. On engines 140 & above you should always turn the engine over until you feel the kick start become VERY stiff. This is called TDC or top dead centre. Once you feel this point you are ready to kick down hard (once). DO NOT stab away at your kick start like a crazed buffoon. This will result in severe kick back which will a) hurt your foot or leg & b) damage the gears in your kick start mechanism or worse, in severe cases you may damage the output shaft bearing of crack your engine cases. This can be a VERY expensive lesson to learn, so treat your kickstart with love and respect - peace.

Throttle - makes it go

Twisty thing on the right hand side of the handle bars. It's purpose is to open the slide in the carb which lets air in & fuel mix producing a combustible gas. You should have minimum free play in your throttle cable, you need to keep your cable lubricated & your throttle should return fully closed when you release it. A sticking throttle often results in a bad crash.

Front Brake Lever - makes it stop

Located just in front of the throttle. When you pull it, it forces hydraulic fluid down the pipe which acts at the calliper to force your brake pads to grip your front brake disk. The resulting friction slows you down. The lever should be firm & not too spongy; if it's spongy you may have a leak, air in your brake line or a damaged component. Faulty brakes often result in a bad crash.

Rear Brake Lever - for skidding

Located just in front of your right foot when sat on the bike, this 'toe' operated lever does the same as the front brake, but to the back wheel. The same rules apply as the front brake lever.

Clutch Lever - to be pulled in when you change gear & let out when you pull away (no applicable to semi auto engines)

Located in front of your left hand, this lever operates the clutch. The clutch is a series of friction plates in a drum which disengages the drive from the engine to the gearbox and thus the back wheel. You should have minimum free play in your cable (adjust it) & your cable should be kept lubricated for long life. A snapped clutch cable results in an end to the days riding. On non start in gear manual engines e.g. 110-120cc, if this cable is over adjusted, stiff, or the lever through the engine case is dry or sticking, you will not be able to start the engine and it will feel like there is no compression when you operate the kick start. Adjust it up, lube it up problem solved.

Handlebars - for steering & hanging on

Make sure they are tight and free from damage. Snapped or loose bars often result in a crash and injury. Use them to turn your bike and experiment with opposite lock once you have the confidence to hang out your tail.

Gear Selector - notch it up to go faster, notch it down to go slower

Located in front of your left foot. All Welsh Pitbikes gearboxes are 'all up'. All the way down is neutral, then you lift the lever to go up through the gears one at a time. If you do not use your clutch you will DRASTICALLY reduce the life of your gearbox.

Suspension adjustments

Rear Shock, Gas

Almost all Welsh Pitbikes shocks are nitrogen filled 'gas shocks'. They have a schrader valve connection to top them up with air (gas) using a high pressure feed such as a shock pump (100-150PSI). DO NOT touch the schrader valve as the gas will escape instantly and you will no longer have any rebound damping on your shock

Pre-load

All Welsh Pitbikes have adjustable pre-load on the rear shock. This allows you to adjust the static load on the shocks spring for your own body weight/preference. If you look at the top of the shock you will see 2 large castellated nuts designed to be adjusted with a 'C' spanner. The lower nut adjusts the preload by compressing the spring. The second nut is a locking nut which prevents the main adjusting nut from coming loose. If your back end is too soft, tighten the castellated nut a couple of turns, lock with the locking nut & re-test your bike. If your back end is too firm, do the opposite and re-test your bike.

Rebound (DNM)

If your bike is fitted with a DNM rear shock (or you have upgraded to DNM) you will also have a rebound adjuster. This is normally a small wheel located at the bottom of the shock with indications for slow or fast. Slow or Fast refer to the speed at which the shock rebounds i.e. bounces back after compression. How you set this is up to you, but we advise a rebound time (whilst static) of approx 0.8-1.2 seconds for offroad & 1.5-2 seconds for tarmac. This is achieved by putting your full body weight on the bike, standing up quickly & measuring the time for the bike to rebound on the rear shock. If your bike is bouncing around at the rear end, or your mates watching can see the rear wheel leaving the ground over bumpy terrain (either on or off-road) your rebound is likely to be set too fast. Slow is down by adjusting the rebound adjuster in the direction of 'slow' 2 clicks and then re-test your bike. If your preload feels fine for your body weight i.e. the rear end compresses sufficiently, yet your bike feels hard on the rear end whilst riding, your rebound maybe too slow & your shock is over compressing due to slow rebound. Speed it up a couple of clicks and get back out there.

Compression (DNM)

If your bike is fitted with a DNM rear shock (or you have upgraded to DNM) you may also have a compression adjuster (top end DNM models only). The compression adjuster (like the rebound adjuster) adjusts the speed of the shock. However, it adjusts the speed at which you can load the shock. This combined with pre-load adjustment can give you varying degrees of active stiffness adjustment on your rear end. The compression adjuster is normally found near the top of your shock & works in the same ways as a rebound adjuster though some may be noted as H & S (hard & soft) rather than S & L (slow & fast).

Forks

Standard forks rarely have any adjustment; however some of the higher models will feature either SP or Marzocchi forks. These both have adjustable compression and rebound damping on each leg. These work in the same way as the adjustments for the DNM shock, however the results can also have a significant effect on how fast your bike will turn e.g. slow rebound after heavy braking will make for a sharp headstock angle and thus faster turn-in. The rebound adjuster is normally found on the top for the forks, the compression adjuster is normally found on the bottom of the forks (underneath). For both adjuster turn clockwise to increase compression or rebound damping.

Please refer to Appendix A for photographs.

Oil

Check your oil level EVERY time you take your bike out. To do this lean your bike against a wall so it is upright, or get a mate to hold it for you (your bike). Unscrew the dipstick (next to your kick start) wipe it off with a cloth then dip it back in the hole (no need to screw it, just dip it down till it won't go any further). The oil level should show on the dipstick in the hatched area at the bottom. Top it up with 10w40 semi synthetic Putolene Force 4 oil (available from Pitbike Direct all good motocross shops). Depending on your riding conditions you should change your oil after maximum 10 hours use. The drain plug is the big 17 mm bolt under your engine. There is an access hole to the bolt through your bash guard.

Chain

Lubrication, keep your chain lubricated & clean is thoroughly after use, we recommend a dry wax such as Putolene tech chain (available direct from Stomp or all good motocross outlets). Tension is also very important, when you ride your bike, your chain will stretch, especially when it's new. Keep an eye on the up and down free play of your chain at it's longest section. Approx 2.5 inches from top to bottom is acceptable. When you adjust it put your full body weight down on the suspension to check the tension when fully loaded, on some models the tension can increase with suspension movement. If your chain is rattling, it's probably too loose. A loose chain can come off and damage your engine cases, chain guard or worse still, your leg. Keep a check on it.

Air Filter

Keep it clean with putolene filter cleaner and then oil it up with putolene filter oil before you next use your bike. Dust, grit and dirty water can get in your engine and this will significantly reduce the life of your piston rings. In extreme cases your piston & barrel can be damaged. We advise that you replace your standard filter after 10 hours use and replace it with an improved quality aftermarket filter such as UNI (available from all good Welsh Pitbike dealers). These then need to be replaced every 20 hours. You wouldn't drink dirty water so don't let your engine breath dirty air.

Bearings

Keep a close eye on your bearings, in particular head set, swing arm and wheel bearings. These ALL take a severe pounding and are subject to all the dirt and grit associated with an off-road machine. Typical wheel bearing life is around 10 hours in severe riding conditions. Swing arm 20 hours and headset 20 hours. Keep them clean and from time to time pop off the dust seals where applicable and re-grease. Water and jet washing will wash away wheel bearing and swing arm bearing grease. Never directly point your jet wash at bearings. If you look after your little balls you will get more out of them.

Cables

Keep them lubed up with putolene cable lube. If you keep them clean and lubed up they will last longer, your bike will be safer to ride and improve your control.

Tyre Pressure

Unless you have a rim lock fitted to your rear wheel, do not allow the tyre pressure to drop below 20 PSI. This is of particular importance on bikes with 140+ cc engines they have the power to spin the wheel inside the tyre & rip the valve off your inner tube. If you want to run low tyre pressure for traction, get a rim lock fitted. Lock it, load it and then let your air out. Unless you want to pinch your front tyre on a rock and get a puncture, the same pressure applies, min 20 PSI. check your tyre pressure before riding else you may be coming home early.

Brake Pads

Check them for wear. Sand destroys brake pads VERY quickly and guess what? most places you will be riding will be sandy. This is even more so when riding in wet conditions. The sand or grit gets on your disks and eats away at your brake pads. Check them before you ride your bike. You should have minimum 3 mm pad left before you ride otherwise you could find yourself with NO brakes. Below 3 mm? get some new pads in there.

Spokes

Depending on your riding style, ability & the power of your engine, you are at some point going to need to tighten your spokes. Before each ride, check all of your spokes especially in the back wheel to see if any have stretched or snapped. Welsh Pitbike wheels rarely need the spokes tightening but please check them before each ride. If your wheel collapses because of loose or damaged spokes it's likely to cause a bad crash.

Nut & Bolt Check

Regularly go over your bike and check nuts & bolts. If you have stripped components for service or replacement always use Lock Tight thread locking compound when you re-assemble. This applies to all nuts and bolts on a pit bike.

Replacement Parts

When you need to replace parts always use genuine parts available from your local Welsh Pitbikes dealer or direct from Welsh Pitbikes via mail order. Be aware that although a part may look like a Welsh Pitbike part it is HIGHLY unlikely to be of the same quality. Places like ebay are littered with copy substandard pitbike parts, only buy the best, and only buy Welsh Pitbike original equipment and performance upgrades.

Riding Tips For Long Engine Life

IMPORTANT

Do not over rev your engine as you may cause damage to valves and piston. This is particularly applicable to the larger displacement engines from 140 upwards. Under load the engine is capable of revving into major valve bounce that can cause permanent damage to your engine. If you feel the power dropping off or start to hear valve bounce it is critical that you change up a gear or ease off the throttle. Valve bounce is often confused as being a rev limiter. It is not a rev limiter it is the sound of the engine being mechanically incapable of closing it's valves fast enough and thus cannot increase it's own speed further. The resulting effect in extreme cases in the piston hits the valves and destroys the top end of your engine. Very expensive.

Do not stamp through the gears - always use the clutch. If you do not use your clutch you put excessive load on you gear selector forks which will wear out very quickly resulting in slipping, jumping or missing gears. In extreme cases, you may bend the selector forks with the same effect.

If you miss a gear do NOT stamp into gear from high engine revs. Your gear shaft is now rotating at a very high speed, if you stamp into gear now, your gears will have to mesh at VERY different speeds. This will cause rapid wear or damage to your gear teeth reducing the life of your gearbox.

Do not drop your clutch heavily, or slip it unnecessarily. Dropping the clutch puts immense strain on your drive train components. Slipping your clutch will cause excessive wear to your clutch plates.

PDI - Guide for Assembly

(Qualified Persons Only)

If your bike has been supplied in a crate, this is NOT the same as buying a bike fully PDI'd (Pre Delivery Inspection) bike from a dealer. It is entirely your responsibility to ensure a qualified motorcycle mechanic puts your bike together correctly. Failure to do so will invalidate the warranty supplied with your bike. Please note, in order to validate your warranty you must fill out and send to us, the 'warranty card'

This document is supplied only as a guide to qualified persons and may not be exhaustive. Each machine may require individual attention and therefore ONLY qualified persons should only carry out the following:

- Remove Bike and all accessories from crate & inspect to ensure all necessary parts have been supplied correctly. Inspect for damage and if any is present, contact your dealer or Welsh Pitbikes direct immediately
- Mount shock (where applicable)
- Check and tighten lower fork bolt, reached from underside of forks. If the bolt is loose, remove it, apply Lock Tight thread locking compound & re-assemble
- Mount front wheel & ensure free rotation - check for potential bearing &/or brake drag use locking wheel nut (supplied). Ensure the brake disk is not warped or out of centre
- Loosen triple clamps around fork legs & set desired fork height. Use copper grease on triple clamp bolts to prevent damage to the alloy threads and then firmly tighten.
- Fit handlebars and clutch cable to clutch lever
- Pump front brake lever until firm (bleed if necessary). Check front braking system for potential leaks or damage by pulling brake lever very hard several times. Visually inspect all joints for leaks & remedy where necessary. Spin wheel to ensure calliper is releasing from disk
- Fit rear brake pedal where necessary & repeat procedure described for front brake
- Check brake fluid levels, top up with DOT4 where necessary
- Fit front mudguard using thread locking compound where required.
- Fit footpegs
- Ensure the correct pressure in tyres 20-30 PSI for off-road.
- Loosen rear wheel and adjust chain tension. Find tightest point in chain by spinning rear wheel, there should be no more than 35mm up & 35mm down at the longest section of chain with rider sat on bike. Ensure chain runs true & is on top of chain roller. Ensure chain does not foul on rear chain guide (use shims/washer to space if necessary)

- Working from front to rear, ensure all nuts & bolts are tight. Where no nyloc nuts or spring washers are present, ensure thread-locking compound has been used. If none has been used during factory assembly, remove nut or bolt, apply locking compound and re-tighten. Pay particular attention to the following critical safety areas: Wheel nuts, brake calliper bolts (thread lock), Top & rear engine bolts (frame must be hard tight against the engine, use thread lock), chain tensioners, rear shock bolts, triple clamp bolts (yokes), Handlebars, brake/clutch/throttle, swing-arm, front & rear sprocket
- Check all engine hardware is tight, (including but not exclusive): flywheel, inlet manifold, exhaust bolts,
- Adjust tappets. Set engine to TDC (ONLY rotate engine anticlockwise as decompression cam will effect exhaust clearance on some engines) & check cam timing alignment (cam sprocket/cylinder head - adjust is necessary), remove tappet covers & adjust tappet clearances ~0.15mm inlet, 0.2mm exhaust (4 & 6 thou inch)
- Ensure nothing is touching the exhaust system. On oil cooled models, ensure the oil cooler pipes do not touch the exhaust manifold and that the heat protection springs are located on the correct part of the pipe in order that should they touch the exhaust the heat will not damage them.
- Ensure all cables pipes & wiring are away from moving components such as the wheels, use cable ties where necessary
- Carb -SS140 - set needle height on second notch from bottom for UK conditions. 110/125/160 engines normally do not need adjustment
- Fuel bike and check for fuel leaks
- If fuel leaks from carb overflow - remove carb & adjust float height. Check for any debris which may be blocking the fuel shut-off valve
- Check oil level with bike in upright position using dipstick. Top up with Putolene 10W 40 semi synthetic oil, if necessary
- Adjust tension for both clutch & throttle cables
- Ensure wheel spokes are tight & wheels run true

- Start engine and warm up (using choke if necessary). Set idle speed so engine ticks over comfortably without stalling or racing
- Test machine ensuring all gears are present and correct & that all controls are fluid and functional. Ensure brakes are working efficiently (bearing in mind that the pads will need to bed in prior to optimum performance)

Engine Running In

Run bike at no more than 2/3's throttle & do not allow engine to rev to a high speed. Engine break-in should be no less than 2 hours.

2 Hour Service

After 2 hours carry out the following checks & procedures:

- Drain oil & replace with Putoline Force 4 semi synthetic 10w 40 4-stroke engine oil
- Check all nuts & bolts & tighten where necessary (use PDI data as reference)
- Check flywheel nut is tight
- Check wheel spokes (especially rear wheel drive side) and tighten where necessary
- Re-adjust throttle cable & clutch cable if required
- Re-tension chain
- Check wheel bearings for any sign of wear or free-play
- Check brake calliper operation & brake pad wear
- Check spark plug gap ~0.6mm-0.7mm
- Check tyre pressures

Fault Finding

Engine

- **Exhaust Glows Red (fast tick over)** - Carburetion too lean, richen mixture via raising needle (lower circlip to raise needle)
- **Engine misfires at mid to high engine speed, open throttle** - Mixture too rich, drop needle or change Jet
- **Engine Pops & bangs on over-run (deceleration)** - mixture too lean, adjust air screw clockwise then re-test

- **Engine kicks back hard whilst starting** - Ignition too advanced (where adjustable, retard ignition), or mixture too lean
- **Engine difficult to start - engine flooding or mixture too rich** - check float height
- **Engine Difficult to start** - too lean, pilot jet blocked or float height incorrect (not enough fuel in float chamber) can be detected if engine starts with throttle significantly open
- **Weak Spark** - Pick-up coils too far from flywheel or bad earth
- **Erratic spark** - faulty CDI
- **No spark** - Either poor earth or faulty Rotor Coils/CDI/Coil/Lead/Cap/Plug - use moving coil multimeter to diagnose. 3 volts from pick up coil (positive to chassis), 6 volts from generator coil (positive to chassis), 6 volts from CDI (positive to chassis). Check also conductivity of HT lead, end to end & also plug cap end to end (possible failed resistor in cap). Check for faulty kill switch by disconnecting it.
- **Engine fires once or kicks back, but will not run** - cam timing out
- **Engine will not rev out lacks power** - cam timing out or VERY worn valve springs (possible faulty plug)
- **Engine has little mid range performance but revs out fine** - cam timing out
- **Engine will not tick over** - turn idle screw clockwise, if still not possible to correct, check for air leaks
- **Fuel leaks from overflow** - Floats set incorrectly, needle valve blocked by debris (common on new bike) or sticking floats
- **Engine runs fine, but then starts to misfire** - faulty rotor coils/CDI/Coil/Plug (something is breaking down under load/temp)
- **Rattles from engine (top end)** - Tappets set incorrectly or loose cam chain (top end noise)
- **Rattle from engine - chattering (bottom end)** - loose or worn clutch / clutch gears / missing teeth or loose flywheel
- **Knocking from engine (top end)** - worn/cracked piston or gudgeon pin - replace
- **Knocking from engine (bottom end)** - worn main or big end bearings - replace
- **Engine will not tick over when warm** - tappets set incorrectly
- **Engine will not return to idle & races** - sticking throttle slide/cable or air leak between carb & cylinder head
- **Erratic engine idle** - air leak between carb & cylinder head, blocked air jets in carb, faulty carb
- **Engine runs fine from start up then cuts out** - blocked fuel tank breather causing vacuum - check
- **Clutch slips** - worn clutch plates, worn clutch springs, incorrect cable adjustment, stiff clutch actuator through side cases or wrong oil weight / have you put fully synthetic oil in your engine? Drain & correct
- **Missing a gear /jumps out of gear/slipping gear (jolting)** - worn or bent selector forks bent or damaged selector shaft, replace faulty gearbox parts
- **Kick start slips** - worn or damaged kick start gears, shattered or badly worn output shaft bearing or cracked engine cases, remove clutch case & inspect
- **Engine seized** - failed oil spinner or clutch (remove clutch case) seized piston (remove head & check) - snapped conrod (remove head & check)
- **Engine produces black smoke** - too much fuel, check float level & main jet is secure (use smaller jet if you have changed from standard)
- **Engine produces white/blue smoke** - worn piston rings or piston. On very old engines replace valve stem seals
- **Engine loses oil through breather pipe** - check cylinder head bolts are tight & are not stud bound i.e. spring back when tightened, check head gasket and or cylinder head oil seals for damage

- **Engine loses oil through output shaft / clutch seals** - blocked/kinked engine breather or old worn seals, also possible excessive blow by from worn piston/rings but this should be evident from white exhaust smoke long before losing oil through breather.

Suspension

- **Shock feels springing, no rebound damping** - check shock pressure 100-150 bar (using shock pump) If loses pressure quickly seals gone replace shock
- **Clunking from rear over bumps** - check shock bushes for wear, check shock bolts are tight, check swing arm bolts are tight, check swing arm bearings for wear, check rear wheel bearings
- **Oil leaking from shock** - seals gone, replace shock
- **Back end very soft** - check shock preload locking nut is tight. Re-adjust as necessary, if does not remedy spring is worn, replace shock
- **Forks leak oil** - replace seals & re-fill with oil (175 ml per leg 7.5-10 weight)
- **Forks have no or little rebound** - replace seals & re-fill with oil (175 ml per leg 7.5-10 weight)
- **Forks are soft** - replace springs
- **Fork stanchions are pitted/rusty** - replace forks

Brakes

- **Feel spongy** - check pads for inconsistent wear, bleed system with fresh DOT4 fluid
- **Feel firm but do not work** - Pads incorrectly fitted & thus unevenly worn or wrong size disk - inspect pads for inconstant wear
- **No feel** - lever goes full travel without actuating brake - rear brake - adjust master cylinder actuating rod, check for leaks, bleed, replace brake assembly
- **Metallic noise during braking** - replace pads
- **Front/rear brake drag** - inspect and clean calliper, use copper grease on calliper floating pins, worn pads (replace), warped brake disk (replace)
- **Grabs (shudders) under braking** - loose calliper bolts or pins, worn calliper housing

Other

- **Chattering from rear** - Chain tension / worn sprockets/chain
- **Play in rear end** - loose swing arm or shock, worn swing arm bearings or wheel bearings check & replace
- **Knocking front end** - loose or worn headstock bearings
- **Steering notchy** - headstock bearings too tight or worn

Guidelines for Correct jetting (fuel mixture adjustment)

In order to check your bike fuel air mixture & thus running performance, take out the spark plug and check the electrode; the colour should be golden brown. If it is white, the engine is running too lean (not enough fuel). If it is black (sooty colour) it is too rich (too much fuel). If it is white & black, the engine is VERY lean & causing misfire, which you should be able to detect whilst riding. As your jets are close to what they should be for the UK, minor alterations can be made by adjusting the needle height on your carb, without the need for different sized jets.

To add more fuel, raise the needle one notch. This is achieved by removing the carb from the engine, removing the throttle slide, removing the needle & adjusting the position of the circlip. Conversely, if you need to reduce the amount of fuel, drop the needle one notch. Re-assemble the carb & continue testing, remembering to check the colour of your spark plug. Once you have achieved the correct full load fuelling, you can set the idle mixture screw. The 140 - 160 engines like to run very rich at idle, this way you get a clean progression from idle jet to main jet. To achieve a richer mixture, turn the air screw (next to filter) clockwise. Idle speed may need to be adjusted at same time to keep engine running.

Storage

It is advisable to fully service and lubricate the bike prior to leaving the bike unused/unattended for any length of time. You should also drain down all fuel from the tank & carb if you are not to use the bike from more than 2 weeks.



Proof of Purchase, PDI & Warranty

Congratulations on the purchase of your Welsh Pitbike. Please return this warranty card to the address below to register your bikes details with us and fully validate your 30 days parts warranty.

Date Purchased Purchased from/via

Customer Details

Name

Address

Telephone Number

Bike Details

Model

VIN (located on headstock chassis plate)

Engine Number (located by gear shifter)

Mechanic/Technician Details & Declaration

Name

Address (or stamp)

I certify that I have performed the Pre Delivery Inspection according to the latest available instructions supplied by Welsh Pitbikes. Please see www.ridestomp.com/assets/PDISheet.pdf if you do not have a PDI instruction sheet.

PDI issue number (see PDI document)

Signature

Any queries, please contact us on 0845 257 1056 or 01730 720020
Welsh Pitbikes, 41 Parsonage Estate, Rogate, Petersfield, Hants GU31 5HJ



Rear wheel chain tensioners



Ignition Coil



Spark Plug



Idle adjust screw / air mix screw



Swing arm bolt and bearing location



DNM compression and preload adjust



Flywheel & ignition pick up



Engine tappet cover



Cam Sprocket / timing



Engine crank breather pipe



Fuel Tap on/off/reserve



Headset adjust nut



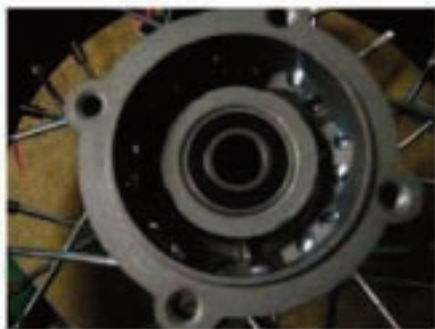
Lever reach adjustment



Front Brake Master cylinder



Spoke tension



Wheel bearing



Fork Seals



Chain roller & slider



CDI unit



front sprocket



Gear selector



Kick start



Throttle cable adjust



Clutch cable adjust



Air Filter



Oil drain plug



Oil level dip stick



Rear brake master cylinder



Front brake calliper